

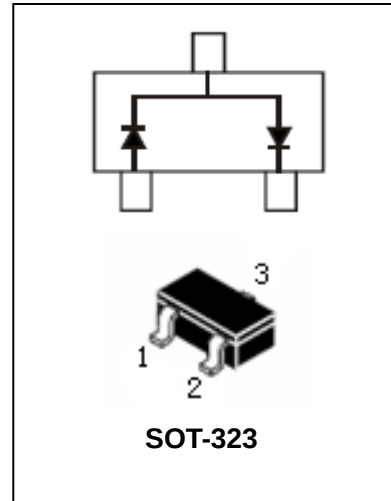
DUAL SURFACE MOUNT LOW LEAKAGE DIODE

BAV199W

FEATURES

- Very Low Leakage Current.
- Lead Free By Design/ROHS Compliant.
- Surface mount package ideally suited for automatic insertion.

HF



APPLICATIONS

- For general purpose switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAV199W	K52	SOT-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	85	V
Working peak reverse voltage	V_{RWM}		
DC Reverse voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Repetitive Peak forward current	I_{FRM}	500	mA
Non-Repetitive Peak forward surge current	I_{FSM}	0.5	A
@t=1.0s		1	
@t=1.0ms		4	
Forward continuous current	I_{FM}	160	mA
Single diode		140	
Double diode			
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	625	°C/W
Operating and storage temperature range	T_j, T_{STG}	-65 to +150	°C

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	Typ	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$	85	-	-	V
Reverse voltage leakage current	I_R	$V_R=75V$ $V_R=75V, T_J=150^\circ C$	-	-	5 80	nA nA
Forward voltage	V_F	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$	-	-	0.9 1 1.1 1.25	V
Total capacitance	C_T	$V_R=0V, f=1MHz$	-	2	-	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$	-	-	3	us

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

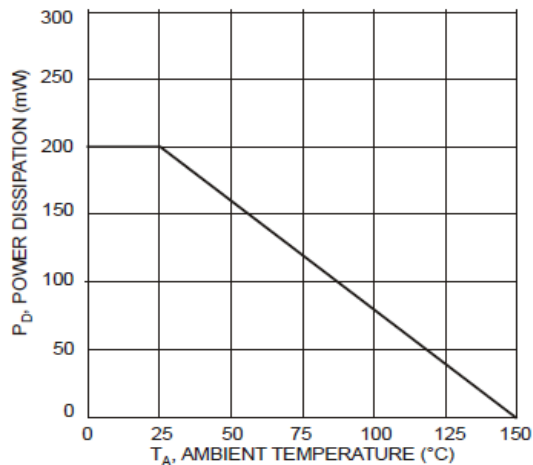


Fig. 1 Power Derating Curve, Total Package

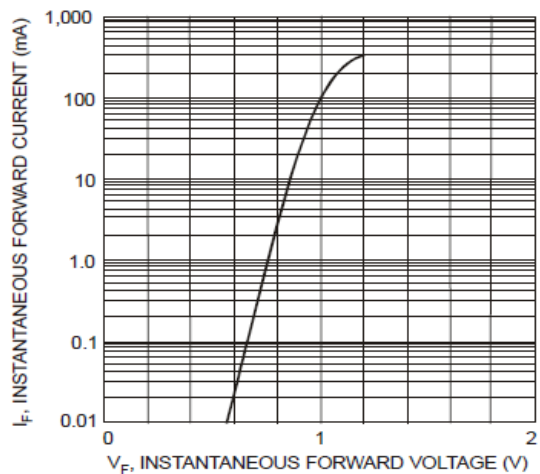


Fig. 2 Typical Forward Characteristics, Per Element

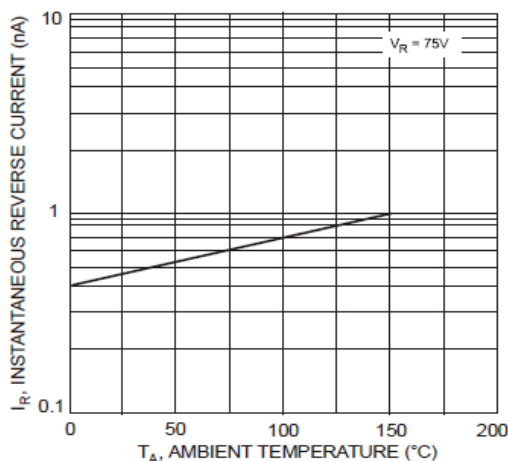


Fig. 3 Typical Reverse Characteristics, Per Element

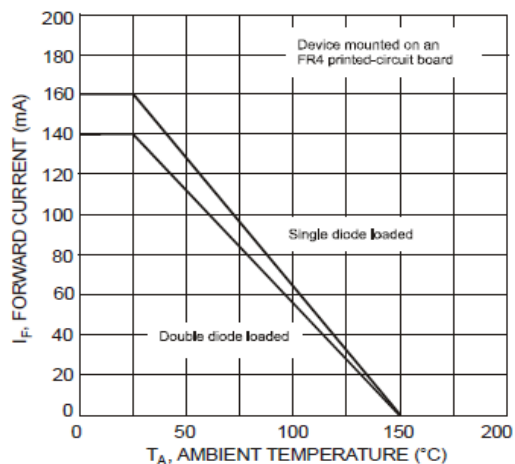


Fig. 4 Current Derating Curve, Per Element

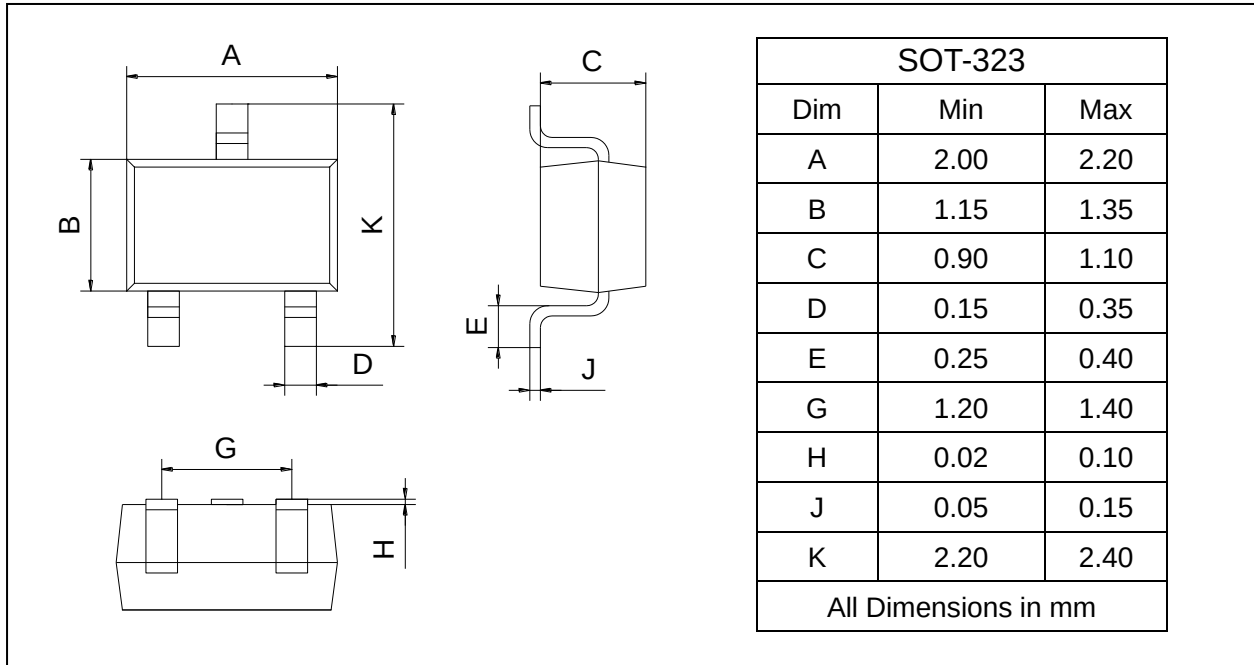
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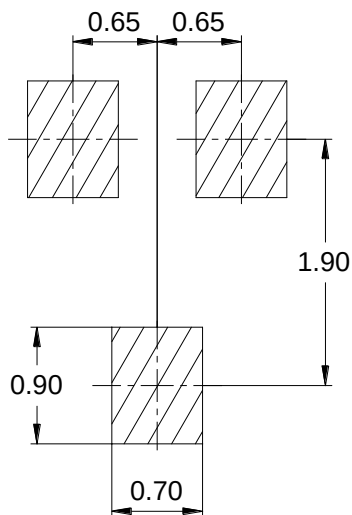
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
BAV199W	SOT-323	3000pcs / Tape & Reel